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| **Domain** | **Grade 3 Cluster Heading** | **Grade 4 Cluster Heading** | **Grade 5 Cluster Heading** |
| Counting and Cardinality |  |  |  |
| Operations and Algebraic  Thinking | * Represent and solve problems involving multiplication and division. * Understand properties of multiplication and the relationship between multiplication and division. * Multiply and divide within 100. * Solve problems involving the four operations, and identify and explain patterns in arithmetic. | * Use the four operations with whole numbers to solve problems. * Gain familiarity with factors and multiples. * Generate and analyze patterns. | * Write and interpret numerical expressions. * Analyze patterns and relationships. |
| Number and Operations  in Base Ten | * Use place value understanding and properties of operations to perform multi-digit arithmetic. | * Generalize place value understanding for multi-digit whole numbers. * Use place value understanding and properties of operations to perform multi-digit arithmetic. | * Understand the place value system. * Perform operations with multi-digit whole numbers and with decimals to hundredths. |
| Number and Operations—Fractions | * Develop understanding of fractions as numbers. | * Extend understanding of fraction equivalence and ordering. * Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. * Understand decimal notation for fractions, and compare decimal fractions. | * Use equivalent fractions as a strategy to add and subtract fractions. * Apply and extend previous understandings of multiplication and division to multiply and divide fractions. |
| Measurement and Data | * Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. * Represent and interpret data. * Geometric measurement: understand concepts of area and relate area to multiplication and to addition. * Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures. | * Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. * Represent and interpret data. * Geometric measurement: understand concepts of angle and measure angles. | * Convert like measurement units within a given measurement system. * Represent and interpret data. * Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition. |
| Ratios and Proportional  Relationships |  |  |  |
| The Number System |  |  |  |
| Expressions and Equations |  |  |  |
| Functions |  |  |  |
| Geometry | * Reason with shapes and their attributes. | * Draw and identify lines and angles, and classify shapes by properties of their lines and angles. | * Graph points on the coordinate plane to solve real world and mathematical problems. * Classify two-dimensional figures into categories based on their properties. |
| Statistics and Probability |  |  |  |